

# UPC2025: The second international workshop on the physics of Ultra Peripheral Collisions

Contribution ID: 31

Type: **not specified**

## MC@NLO for UPCs in Sherpa

*Wednesday 11 June 2025 11:40 (20 minutes)*

We discuss recent developments in the Sherpa event generator with regard to UPCs. Different form factors for the photon flux for both protons and heavy nuclei are compared and finite size effects of the emitters are taken into account. We present preliminary results for jet production at NLO matched to the parton shower using MC@NLO, as well as NLO QED calculations for exclusive muon-pair production at the LHC, comparing to measurements by ATLAS and CMS.

**Author:** MEINZINGER, Peter (Zürich University)

**Presenter:** MEINZINGER, Peter (Zürich University)

**Session Classification:** Monte Carlo event generators for UPCs and photon-mediated processes

**Track Classification:** Monte Carlo event generators for UPCs and photon-mediated processes